

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

NETWORK-1 TECHNOLOGIES, INC.,	§	
	§	
	§	
<i>Plaintiff,</i>	§	
	§	CASE NO. 6:11-CV-492
v.	§	
	§	
ALCATEL-LUCENT USA INC., <i>et al.</i> ,	§	
	§	
<i>Defendants.</i>	§	
	§	

REPORT AND RECOMMENDATION
OF THE UNITED STATES MAGISTRATE JUDGE

This Report and Recommendation construes the disputed claim terms in United States Patent No. 6,218,930 (“the ’930 Patent”), asserted in this suit by Plaintiff Network-1 Technologies, Inc. Also before the Court is Defendants’ Motion for Summary Judgment of Invalidity Under 35 U.S.C. § 305. Doc. No. 609.

On June 2, 2016, the parties presented oral arguments on the disputed claim terms and the improper claim broadening issues at a *Markman* hearing. Based on the analysis stated herein, the Court resolves the parties’ claim construction and claim broadening disputes and **ADOPTS** the constructions set forth below. It is also recommended that Defendants’ Motion for Summary Judgment be **GRANTED-IN-PART** and **DENIED-IN-PART**.

BACKGROUND

Plaintiff Network-1 Technologies, Inc. (“Network-1”) filed the above-captioned suit on September 15, 2011 alleging infringement of the ’930 Patent. The Court previously construed terms of the ’930 Patent in *Network-1 Security Solutions, Inc. v. D-Link Corp., et al.*, No. 6:05-cv-291, Doc. No. 137 (E.D. Tex. Nov. 20, 2006) (“*D-Link Markman Order*”), and *Network-1*

Security Solutions, Inc. v. Cisco Systems, Inc., No. 6:08-cv-30, Doc. No. 251 (E.D. Tex. Feb. 16, 2010) (“*Cisco Markman Order*”), Doc. No. 328 (May 18, 2010) (“*Cisco Reconsideration*”).

In July 2012, a request for *ex parte* reexamination was filed (“the 401 reexamination”). Doc. No. 609 at 3. In response to rejections of challenged claims 6, 8, and 9, Network-1 filed an Amendment and Reply that responded to the rejections and added new claims 10-23 to the ’930 Patent. Doc. No. 609 at 3. A reexamination certificate issued on October 14, 2014. Doc. No. 609, Ex. 7. The ’930 Patent was subject to a subsequent *ex parte* reexamination (“the ’444 reexamination”). Doc. No. 609 at 4. A reexamination certificate issued in that proceeding on November 9, 2015. Doc. No. 609, Ex. 9.

Sony filed a Petition for Post-Grant Review on February 16, 2015. Doc. No. 502. This case was stayed and administratively closed pending the U.S. Patent Trial and Appeal Board’s (PTAB) action on Sony’s Petition. Doc. No. 558. The PTAB denied Sony’s Petition, Sony’s Request for Rehearing, and Sony’s second Request for Rehearing. Doc. No. 576 at 2. On April 8, 2016, the case was re-opened.

APPLICABLE LAW

Claim Construction

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313–1314; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification, and the prosecution history. *Phillips*, 415 F.3d at 1312–13;

Bell Atl. Network Servs., 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language guides the Court’s construction of claim terms. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other claims, asserted and un-asserted, can provide additional instruction because “terms are normally used consistently throughout the patent.” *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370, 116 S. Ct. 1384, 134 L. ed. 2d 577 (1996)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *see also Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316.

Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elam Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent.”). The well-established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003).

The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002); *see also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir. 2003) (“The disclaimer . . . must be effected with ‘reasonable clarity and deliberateness.’”) (citations omitted). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the

claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1324.

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” a court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

Impermissible Claim Broadening

A patentee is not permitted to enlarge the scope of a patent claim during reexamination. 35 U.S.C. § 305. “Whether amendments made during reexamination enlarge the scope of a claim is a matter of claim construction.” *Creo Prods., Inc. v. Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002). The Federal Circuit has “strictly interpreted § 305 to prohibit any broadening amendments,” such that a “reexamined claim cannot be broader in any respect, even if it is narrowed in other respects.” *Senju Pharm. Co., Ltd. v. Apotex Inc.*, 746 F.3d 1344, 1352 (Fed. Cir. 2014); *Predicate Logic, Inc. v. Distributive Software, Inc.*, 544 F.3d 1298, 1303 (Fed. Cir. 2008). The broadening inquiry under § 305 involves two steps: (1) “analyze the scope of the

claim prior to reexamination” and (2) “compare it with the scope of the claim subsequent to reexamination.” *Creo*, 305 F.3d at 1344.

ANALYSIS

I. Agreed Terms¹

The parties have submitted the following agreements (Doc. No. 620-1 at 29, 33, 39, 44; Doc. No. 612 at 22):

Term	Agreed Construction
“adapted for data switching”	“configured to route (switch) data from a sending device to one or more receiving devices addressed by the sending device, using temporary rather than permanent connections”
“access device”	“a device that can receive and transmit data over a network”
“data signaling pair”	“a pair of wires used to transmit data between the data node and the access device”
“controlling power”	No construction necessary

In light of the parties’ agreements on the proper construction of these terms, the Court **ADOPTS AND APPROVES** these constructions.

II. Disputed Terms in the ’930 Patent

The ’930 Patent, titled “Apparatus and Method for Remotely Powering Access Equipment Over a 10/100 Switched Ethernet Network,” issued on April 17, 2001, and bears an earliest priority date of March 10, 1999. The Abstract states:

¹ The term “Adapted for Data Switching” was originally disputed but Defendants withdrew their construction and did not object to Network-1’s construction. *See* Doc. No. 612 at 22. The term “Controlling Power” was also originally disputed but the parties now agree that there is no need for the Court to construe the term. *Id.*

Apparatus for remotely powering access equipment over a 10/100 switched Ethernet network comprises an Ethernet switch card with a phantom power supply for remote access equipment and added circuitry for automatic detection of remote equipment being connected to the network; determining whether the remote equipment is capable of accepting remote power in a non-intrusive manner; delivering the phantom power to the remote equipment over the same wire pairs that deliver the data signals, and automatically detecting if the remote equipment is removed from the network.

a. “main power source” (Claims 6, 17, and 20-23)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
a source of power connected to supply power to the data node and deliver a low level current to the access device	a DC power source

The crux of this dispute is whether the “main power source” is limited to a DC power source or whether it can be an AC power source as well. This same dispute arose in *Cisco* and the Court construed the term “main power source” as “a DC power source.” *Cisco Markman Order* at 8-10; *Cisco Reconsideration* at 3-4. Defendants advocate for the same construction as *Cisco*. Doc. No. 611 at 11. Network-1 argues that the independent claims do not have an alternating current (“AC”) or direct current (“DC”) limitation. Doc. No. 596 at 8.

The *Cisco* construction is reinforced by the specification as well as by the explanation of Defendants’ expert here that a broader construction would render the claimed invention inoperable. *See* Doc. No. 612, Ex. B. (“Neikirk Decl.”) at ¶¶ 35-38. Dr. Neikirk, Defendants’ expert, opines that “if a network device was to receive AC power, the device would likely either fail to function (i.e., because its requisite DC voltage was absent) or would be damaged because its circuitry was not designed to handle AC power.” Neikirk Decl. at ¶ 36. He further states that the patent explains that “[t]here are three states which can be determined: no voltage drop, a fixed level voltage drop, or a varying level voltage drop.” *Id.* at ¶ 37 (citing ’930 Patent at 3:2-4). If the “main power source” was providing AC current, Dr. Neikirk argues it could not detect

the second state—a fixed voltage drop. *Id.* He concludes that if the “main power source” was providing AC current, the “system would be inconsistent with the teachings of the ’930 patent.” *Id.* “A construction that renders the claimed invention inoperable should be viewed with extreme skepticism.” *AIA Eng’g Ltd. v. Magotteaux Int’l S/A*, 657 F.3d 1264, 1278 (Fed. Cir. 2011) (quoting *Talbert Fuel Sys. Patents Co. v. Unocal Corp.*, 275 F.3d 1371, 1376 (Fed. Cir. 2002), *vacated and remanded on other grounds*, 537 U.S. 802 (2002)).

Network-1’s expert urges that data nodes, such as the 8-port switches illustrated in Figure 3 of the ’930 Patent, could operate on AC power. *See* Doc. No. 618-1 (“Knox Decl.”) at ¶¶ 129-138. But Claim 6, for example, recites a limitation of “delivering a low level current from said main power source to the access device over said data signaling pair.” ’930 Patent at 4:60-62. Network-1 has not demonstrated that the type of operating power that could be used for a data node necessarily has any bearing upon the type of power that must be used for the low level current delivered on the data signaling pair.

Additionally, Network-1’s reliance on *Inter Partes* Review (“IPR”) proceedings does not account for the broader claim construction standard applied in IPR. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1276-78 (Fed. Cir. 2015), *aff’d*, *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016). Similarly, Network-1 relies on the broad usage of the term “main power source” in a prior art patent or a dictionary definition. *See* Doc. No. 596 at 8-9. However, the ’930 Patent uses the term “main power source” in a specific context and should be construed within that context. Therefore, the Court construes the term **“main power source”** to mean **“a DC power source.”**

b. “secondary power source” (Claims 6, 9, 14, and 20-23)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
a source of power connected to provide power from the data node to the access device using the data signaling pair; the secondary power source can be the same source of power as the main power source	a source of power connected to provide power between the data node and the access device using the data signaling pair; the secondary power source is physically separate from the main power source

There are two main disputes: (1) whether the secondary power source must be physically separate from the main power source; and (2) whether the Court’s prior construction of this term should govern in this case. In *D-Link* and *Cisco*, the Court construed “secondary power source” to mean “a source of power connected to provide power between the data node and the access device using the data signaling pair. The secondary power source is physically separate from the main power source.” *D-Link Markman Order* at 6; *Cisco Markman Order* at 14. Again, Defendants propose the same construction as *D-Link* and *Cisco*.

Network-1 argues that the ordinary meaning of “secondary power source” does not require physical separation from the main power source. Doc. No. 596 at 12. Rather, Network-1 argues that by using the modifiers “main” and “secondary,” as opposed to “first” and “second,” “the claims are drafted such that the ‘main power source’ and the ‘secondary power source’ may be the same, different, or overlapping as long as they perform their respective functions.” *Id.* at 13 (citing *Linear Tech. Corp. v. International Trade Comm’n*, 566 F.3d 1049, 1055 (Fed. Cir. 2009)). However, this is the same argument that was rejected by the Court in *Cisco*. *Cisco* explained that “[u]nlike in *Linear*, the terms at issue in this case are not ‘second’ and ‘third’ as mere identifiers; rather, the terms ‘main’ and ‘secondary’ set forth an operational hierarchy.” *Cisco Markman Order* at 11.

Furthermore, in Claim 6 of the ’930 Patent, whereas the “main power source” supplies

power “to the data node,” the “secondary power source” supplies power “from the data node.” ’930 Patent at 5:56-58. This distinction reinforces that the secondary power source must be physically separate from the main power source. Network-1’s reliance on any IPR proceedings to the contrary does not account for the broader claim construction standard applied in the IPR proceeding. Likewise, Network-1 has failed to adequately support its seemingly novel argument that Plaintiff’s position in the IPR proceeding gave rise to a disclaimer that would broaden the claim scope in its favor. Doc. No. 596 at 16.

Reaching the same conclusion as *D-Link* and *Cisco*, the secondary power source must be physically separate from the main power source. Plaintiff’s reliance on an extrinsic dictionary definition fails to override the intrinsic evidence already considered in *Cisco*. However, Network-1 is correct that *Cisco* explains that “the Court’s construction in the *D-Link* case does not require separate *identifiable* physical elements for each of the power sources.” *Cisco Markman Order* at 11 (emphasis in original). *Cisco* explains that *D-Link* “requires only that there be physically separate ‘driving points.’” *Id.* at 12. Thus the driving points of the secondary power source must be physically separate from the driving points of the main power source. *See Id.* at 10-14; *see also D-Link Markman Order* at 6-7.

Therefore, the Court construes the term “**secondary power source**” to mean “**a source of power connected to provide power between the data node and the access device using the data signaling pair; the driving points of the secondary power source must be physically separate from the driving points of the main power source.**”

c. “low level current” (Claims 6, 12-14, 20, and 22-23)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
a current at a level that is sufficiently low that, by itself, it will not operate the access device; a data signal is not a low level current	a current sufficient to cause the access device to start up, but not sufficient to sustain the start up

There are two disputes over the term “low level current”: (1) whether the low level current must be sufficient “to start up” the remote device; and (2) whether a “low level current” encompasses a data signal. Defendants propose the same construction from *D-Link* and *Cisco*, while Network-1 advocates for a construction very similar to the construction reached by the PTAB in an IPR of the ’930 patent. Doc. No. 596 at 19; Doc. No. 612 at 3.

In *D-Link* and *Cisco*, the Court construed “low level current” to mean “a current sufficient to cause the access device to start up, but not sufficient to sustain the start up.” *D-Link Markman Order* at 8-9; *Cisco Markman Order* at 16. Network-1 argues that the construction of “low level current” need not include a lower boundary because other limitations in the claim already impose such a boundary. Thus, Network-1 concludes that the first half of Defendants’ proposal is unnecessary. Doc. No. 596 at 17 n. 10.

However, construction is appropriate to give meaning to the constituent term “low.” In *D-Link* and *Cisco*, the Court concluded that the low level current must be sufficient to initiate start up. *See D-Link Markman Order* at 8-10; *see also Cisco Markman Order* at 15-16. The current need not be sufficient to result in a completed start up and thus the prior construction from *D-Link* and *Cisco* must be clarified. The current must be sufficient to “begin start up” rather than “cause start up,” thus eliminating any implication that the current must be sufficient to result in a completed start-up. *See ’930 Patent* at 3:12-17.

As to whether a “low level current” encompasses a data signal, Network-1 has

demonstrated that the patentee disclaimed the scope of “low level current” to exclude a “data signal.” *See* Doc. No. 596 at 23 (citing *id.* at Ex. 7, Mar. 12, 2013 Patent Owner’s Preliminary Response at 8-10 (“This other art taught using a data signal . . . rather than a ‘low level current,’ for detection”)). Disclaimers can arise during reexamination. *See, e.g., Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1266 (Fed. Cir. 2012) (“A patentee’s statements during reexamination can be considered during claim construction, in keeping with the doctrine of prosecution disclaimer.”); *Grober v. Mako Products, Inc.*, 686 F.3d 1335, 1341 (Fed. Cir. 2012); *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1366-67 (Fed. Cir. 2014).

Therefore, the Court construes the term **“low level current”** to mean **“a non-data-signal current that is sufficient to begin start up of the access device but that is not sufficient to sustain the start up.”**

d. “preselected condition”² (Claims 6 and 20-23)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Proposal 1: any condition of the sensed voltage level, selected in advance of the sensing	A condition of the sensed voltage level that indicates whether a power supply of the access device begins to start up but is unable to sustain the start up
Proposal 2: any condition of the sensed voltage level that indicates whether an access device is capable of accepting remote power	

The parties dispute whether it is a power supply that must be indicated as beginning to start up. In *D-Link* and *Cisco*, the Court construed “preselected condition” to mean “a parameter of the voltage on the signaling pair that indicates whether an access device is able to accept remote power from the data node.” *D-Link Markman Order* at 12; *Cisco Markman Order* at 17.

² Network-1 also proposed a third alternative construction, similar to the Court’s prior construction in *D-Link* and *Cisco* except for the addition of “preselected”: “preselected parameter of the voltage on the signaling pair that indicates whether an access device is able to accept remote power from the data node.” Doc. No. 596 at 24 n. 11.

Defendants argue that the *Cisco* construction does not resolve the parties' dispute because "the prior construction—like Network-1's proposed constructions—provides insufficient guidance for identifying sensed voltage conditions that indicate an access device can accept remote power in accordance with the teaching of the patent." Doc. No. 612 at 8. Instead, Defendants submit that their proposal "clarifies that it is the power supply of the access device that is attempting to start up, just as the specification discloses." *Id.* at 9 (citing '930 Patent at 3:14-16).

Network-1 contends that "nothing in the words 'preselected condition' or the rest of the claim connotes anything about the remaining concepts in Defendants' proposal: 'a power supply of the access device begins to start up but is unable to sustain the start up.'" Doc. No. 596 at 25. Rather, Network-1 argues that Defendants' proposal improperly imports limitations from preferred embodiments. *Id.* at 25-26.

Claim 6 of the '930 Patent, for example, recites (emphasis added):

6. Method for remotely powering access equipment in a data network, comprising,
 providing a data node adapted for data switching, an access device adapted for data transmission, at least one data signaling pair connected between the data node and the access device and arranged to transmit data there between, a main power source connected to supply power to the data node, and a secondary power source arranged to supply power from the data node via said data signaling pair to the access device,
 delivering a low level current from said main power source to the access device over said data signaling pair,
 sensing a voltage level on the data signaling pair in response to the low level current, and
 controlling power supplied by said secondary power source to said access device in response to a *preselected condition* of said voltage level.

The claim refers to an access device but does not refer to a power supply thereof. The specification describes a condition of the voltage level that would be caused by an access device power supply beginning to start up but failing to start up completely:

If a varying voltage level is detected, this identifies the presence of dc-dc switching supply in the remote equipment. The varying level is created by the

remote power supply beginning to start up but the low current level is unable to sustain the start up.

'930 Patent at 3:12-16.

On balance, this disclosure relates to a feature of a particular embodiment, rather than the claimed invention as a whole, and therefore should not be imported into the construction. *See, e.g., Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005); *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) ("It is . . . not enough that the only embodiments, or all of the embodiments, contain a particular limitation."). Defendants point to the Court's language in *Cisco* that: "The claim language ties low level current to producing a varying voltage level, which is the 'preselected condition' of the claim [(Claim 6)], if the access device can accept remote power." *Cisco Markman Order* at 15.

However, this statement appeared in the discussion of "low level current," not "preselected condition." There is no indication that this language was intended to limit the scope of "preselected condition." *See Cisco*, Doc. No. 475, June 30, 2010 Order at 4 (in ruling on a motion to strike expert testimony, noting that "[t]he Court did not suggest in any way that a detectable response must be the illustrative varying voltage level described in the '930 Patent specification"); *see id.* at 4-6 (finding that the expert improperly "restrict[ed] the Court's construction to the preferred embodiment disclosed in the '930 Patent"); *id.* at 8 (rejecting any "reading [of] the term 'preselected condition' as being either a fixed voltage drop, no voltage drop, or a varying voltage level drop such as a sawtooth waveform produced by a DC-DC switching power supply").

Finally, although the parties do not appear to have any dispute as to the significance of the prefix "pre-" in the disputed term, the construction should give meaning to the full term "preselected condition." The construction should therefore reflect that the condition must be

selected prior to sensing the voltage level.

Therefore, the Court construes the term **“preselected condition”** to mean **“a parameter of the voltage on the signaling pair that indicates whether an access device is able to accept remote power from the data node, wherein the parameter is selected in advance of sensing the voltage.”**

e. “data node” (Claims 6, 20-23)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
data switch or hub, such as an Ethernet switch	data switch or hub

The parties seem to agree that “data node” includes an “Ethernet switch” but is not limited to Ethernet. *See* Doc. Nos. 596 at 1-2 and 612 at 20-21. The parties have disputed whether an example of a “data node,” namely an “Ethernet switch,” should be included in the Court’s claim construction.

Defendants’ proposal is the same construction found by the Court in *Cisco*. *Cisco Markman Order* at 6. Previously, in *D-Link*, the parties agreed that “data node” means “Ethernet switch or hub.” *D-Link Markman Order* at 5. However, because the construction was agreed upon by the parties in *D-Link*, the Court “did not resolve whether or not the term was limited to an Ethernet environment.” *Cisco Markman Order* at 5. When the Court analyzed this issue in *Cisco*, it rejected the proposed Ethernet limitation and construed “data node” to mean “data switch or hub.” *Id.* at 6.

Plaintiff has cited *Charles E. Hill & Associates, Inc. v. Abt Elecs., Inc.*, No. 2:09-cv-313, 2012 WL 72714, at *7 (E.D. Tex. Jan. 10, 2012). In that case, the Court’s construction for “graphics data” included the defendants’ proposal that “[g]raphics range from simple lines, bars or graphs to colorful and detailed images.” *Id.* at *7. The Court noted, however, that “the

examples will assist the jury in distinguishing between ‘graphics data’ and ‘textual data.’” *Id.* *Charles E. Hill* is inapplicable because here there is no such contrast between a “data node” and some other type of node.

In this circumstance, including an example in the construction might tend to be read as limiting rather than as explanatory. Because the parties substantially agree that the scope of “data node” includes Ethernet, but is not limited to Ethernet, Network-1’s proposal of the phrase “such as an Ethernet switch” is unnecessary, and any potential benefit is outweighed by the risk that the examples might be perceived as limiting by the finder of fact. *Cf. Funai Elec. Co., Ltd. v. Daewoo Elec. Corp.*, 616 F.3d 1357, 1366 (Fed. Cir. 2010) (“The criterion is whether the explanation aids the court and the jury in understanding the term as it is used in the claimed invention.”). At the June 2, 2016 hearing, the parties were amenable to proceeding in this fashion. Doc. No. 634, June 2, 2016 *Hearing Transcript* at 100:11-101:4.

Therefore, the Court construes the term **“data node”** to mean **“data switch or hub.”**

f. “from said main power source” / “from a main power source” (Claims 6, 17, 20-23)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
no construction necessary	supplied by a main power source

Network-1 argues that Defendants have not identified any ambiguity in the disputed term and thus no construction is necessary. Doc. No. 596 at 26. Defendants respond that construction is necessary to provide proper context to the claims, and to resolve a dispute between the parties as to the scope of the term. Doc. No. 612 at 19. Defendants argue that “[a]s the term itself suggests, a ‘power source’ is something that supplies, or is the source of, power.” *Id.* However, Network-1 counters that the usage of “supply” in other claim language demonstrates that the word “from” should be afforded a different meaning.” Doc. No. 618 at 12.

Claim 6 of the '930 Patent, for example, recites in relevant part (emphasis added): “delivering a low level current *from said main power source* to the access device over said data signaling pair.” Because surrounding claim language already recites “delivering” the low level current, Defendants’ proposal of the word “supplied” would tend to confuse rather than clarify and would improperly limit the disputed terms to a specific feature of a particular disclosed embodiment. Thus, Defendants have not demonstrated that the “source” is necessarily where the current is created.

Therefore, the Court construes the terms **“from said main power source”** and **“from a main power source”** to have their **plain meaning**.

III. Motion for Summary Judgment of Invalidity Under 35 U.S.C. § 305

Defendants argue that, during reexamination, Plaintiff improperly broadened the scope of the terms “secondary power source” and “low level current” by adding new claims that remove the limitations imposed by the Court’s constructions in *D-Link* and *Cisco*. Doc. No. 609 at 1. Defendants also argue that Plaintiff added new claims that remove the “sensing means,” “sensing a [] voltage level,” “control means,” and “controlling power” limitations. *Id.* Defendants’ arguments are based on the addition of new claims 15, 16, 21, 22, and 23 during reexamination, but Defendants argue that all asserted claims—Claims 6, 11, 13, 14, 17, and 20-23—are invalid as a result. Doc. No. 609 at 6-7.

a. “secondary power source”

Defendants argue that Network-1 impermissibly broadened claim 6 during the '401 reexamination by removing the requirement that the “main power source” and the “secondary power source” be “physically separate.” Doc. No. 609 at 7. “Secondary power source” was construed in both *D-Link* and *Cisco* to require the secondary power source to be physically

separate from the main power source. *D-Link Markman Order* at 7; *Cisco Markman Order* at

14. During the '401 reexamination, Network-1 added new dependent claims 15 and 16 to the '930 patent. Claims 15 and 16, added during reexamination, recite:

15. Method according to claim 6, wherein said secondary power source is the same source of power as said main power source.

16. Method according to claim 6, wherein said secondary power source is the same physical device as the main power source.

Defendants argue that these new claims eliminate the requirement that the power sources be “physically separate.” Defendants cite to *ArcelorMittal* to show that the addition of a dependent claim can have the “the practical effect of expanding the scope of [the independent claim] to cover claim scope expressly rejected by a previous claim construction ruling.” Doc. No. 609 at 8 (citing *ArcelorMittal France v. v. AK Steel Corp.*, 786 F.3d 885, 890 (Fed. Cir. 2015)).

Furthermore, Defendants argue that *ArcelorMittal* found that because the independent claim was impermissibly broadened, all of the claims depending from it (that did not include further limitations) were as well. *Id.* Thus, Defendants conclude that the addition of new dependent claims 15 and 16 have the effect of impermissibly broadening independent claim 6, which thereby broadens each claim depending from claim 6, including claims 11, 13, 14, and 17 that are asserted by Network-1. Doc. No. 609 at 8.

Claims 15 and 16 are not asserted in the present case, and Defendants have not adequately demonstrated that any invalidity as to Claim 15 or Claim 16 necessarily renders Claim 6 invalid. The patentee in *ArcelorMittal* conceded that the scope of the original claims was narrower than the scope of the reissue claims, a fact that is disputed in this case. 786 F.3d at 890. Here, Network-1 argues that the claims added during reexamination are consistent with the scope of the Court’s claim construction as explained in its analysis in *D-Link* and *Cisco* (as to

there being a requirement of physically separate driving points, but not necessarily entirely separate power supplies). Doc. No. 622 at 18.

ArcelorMittal can be further distinguished because the dispute focused on the “law-of-the-case doctrine³,” which is inapplicable here. In *ArcelorMittal*, the Federal Circuit had previously affirmed the district court’s original claim construction. 786 F.3d at 887. Thus, the law-of-the-case doctrine bound the district court to that construction and prohibited the district court from revisiting the original construction. *Id.* at 898-90. The law-of-the-case doctrine is not applicable here, and thus *ArcelorMittal* is distinguishable. Also of note, *ArcelorMittal* reversed the district court’s invalidation of certain claims that the parties agreed were not broadened upon reissue. *Id.* at 888, 890-92.

This result is consistent with *MBO Laboratories, Inc. v. Becton, Dickinson & Co.*, which addressed the “rule against recapture” and which, like *ArcelorMittal*, addressed the analogous forum of reissue: “When a reissue patent contains the unmodified original patent claims and the reissue claims, a court can only invalidate the reissue claims under the rule against recapture. Original patent claims will always survive a recapture challenge under the first step of our rule-against-recapture analysis. Under the first step, we construe the reissued claims to ‘determine whether and in what ‘aspect’ the reissue claims are broader than the [original] patent claims.’ The original claims cannot be broader than themselves.” 602 F.3d 1306, 1319 (Fed. Cir. 2010) (citations and internal quotation marks omitted).

Therefore, the Court rejects Defendants’ invalidity argument based on the usage of “secondary power source” in Claims 15 and 16.

³ “The law-of-the-case doctrine states that when a court decides upon a rule of law, that decision should continue to govern the same issues in subsequent stages in the same case.” *ArcelorMittal*, 786 F.3d at 888 (internal quotations omitted). “The mandate rule, encompassed by the broader law-of-the-case doctrine, dictates that an inferior court has no power or authority to deviate from the mandate issued by an appellate court.” *Id.* at 888-89 (internal quotations omitted).

b. “low level current”

Defendants argue that the addition of new independent claim 21 results in a construction of “low level current” that is broader than the Court’s prior construction of the term and thus claims 6, 20, 22, and 23—which each recite the term “low level current”—are impermissibly broadened. Doc. No. 609 at 14.

In *D-Link* and *Cisco*, the Court construed “low level current” to mean “a current sufficient to cause the access device to start up, but not sufficient to sustain the start up.” *D-Link Markman Order* at 8-9; *Cisco Markman Order* at 16. Claim 21, added during reexamination recites (emphasis added):

21. Method for remotely powering access equipment in an Ethernet data network, comprising,
- (a) providing
 - (i) a data node adapted for data switching,
 - (ii) an access device adapted for data transmission,
 - (iii) at least one data signaling pair connected between the data node and the access device and arranged to transmit data therebetween,
 - (iv) a main power source connected to supply power to the data node, and
 - (v) a secondary power source arranged to supply power from the data node via said data signaling pair to the access device,
 - (b) *delivering a current from said main power source to the access device over said data signaling pair, said current being insufficient, by itself, to operate said access device connected to the data signaling pair;*
 - (c) sensing a voltage level on the data signaling pair in response to the current, and
 - (d) controlling power supplied by said secondary power source to said access device in response to a preselected condition of said voltage level.

Defendants argue that “[b]ecause the ‘current’ recited in claim 21 does not need to be ‘sufficient to cause the access device to start up, but not sufficient to sustain the start up,’ it is impermissibly broader than the ‘low level current’ recited in original independent claim 6.” Doc. No. 609 at 14. Defendants’ argument, however, is based on the premise that the term “low level current” in claim 6 is synonymous with the term “current” in claim 21, and that the language in

claim 21 “describing the recited ‘current’ functions as a construction of ‘low level current’ in claim 6.” *Id.* at 15; *see id.* at 15-17. Defendants have not shown adequate support for this premise. “When different words or phrases are used in separate claims, a difference in meaning is presumed.” *Nystrom v. TREX Co.*, 424 F.3d 1136, 1143 (Fed. Cir. 2005). Defendants have failed to demonstrate that the “current” recited in claim 21 broadens the construction of the “low level current” recited in original independent claim 6. The Court thus rejects Defendants’ invalidity argument based on the usage of “current” in Claim 21.

c. “sensing means” and “sensing”

Defendants argue that new independent claims 22 and 23 omit the requirements of a “sensing means” and “sensing a voltage level”—as required by original claims 1 and 6, respectively—and instead recite a “voltage level” that “can be sensed,” thus broadening the scope of original claims 1 and 6. Doc. No. 609 at 18. Network-1 points to the language “the sensed voltage level” and “said voltage level” in element (e) of each claim to argue that the voltage level must actually be sensed. Doc. No. 622 at 22 (“‘the sensed voltage level’ can only exist if the voltage level is actually sensed”).

In *Cisco*, the Court found Claim 1 invalid, thus the “sensing means” of Claim 1 is not relevant here. *Cisco Markman Order* at 18-23. Further, Defendants have not adequately shown that elimination of the word “sensing” resulted in a broader claim scope because Claims 22 and 23 each require that a voltage level must have been sensed. The Court therefore rejects Defendants’ invalidity arguments in these regards.

d. “control means” and “controlling”

Defendants argue that Claims 22 and 23 are impermissible broadening because they remove the “control means” and “controlling” limitations and instead recite “power . . . is

controlled” and “controlled power,” respectively. Doc. No. 609 at 19. Claims 22 and 23 recite, in relevant part (emphasis added):

22. . . . a secondary power source arranged to supply power from the data node via said data signaling pair to the access device, wherein the *power* supplied by said secondary power source to the access device *is controlled* in response to a preselected condition of the sensed voltage level.

23. . . . receiving at said access device *controlled power* supplied by a secondary power source arranged to supply power from the data node via said data signaling pair to the access device, in response to a preselected condition of said voltage level.

Again, because *Cisco* found Claim 1 invalid, the “control means” of Claim 1 is not relevant here. *Cisco Markman Order* at 18-23. As Network-1 argued, if a power source “is controlled,” as recited in claim 22, or “controlled power” is received, as recited in claim 23, “controlling power” must have occurred because “[t]here cannot be ‘controlled power’ unless power is actually controlled.” Doc. No. 622 at 23. Thus Defendants have not adequately shown that the elimination of “control means” and “controlling” resulted in broader claim scope. The Court rejects Defendants’ invalidity argument in these regards.

e. “providing”

Defendants argue that Claim 23 is impermissibly broader than original claim 6 because it removes the “providing” step that was originally recited. Doc. No. 609 at 20. Original claim 6 requires “providing” all system components recited in claim 6, including the “data node adapted for data switching,” “access device adapted for data transmission,” “data signaling pair,” “main power source,” and “secondary power source.” *Id.* Defendants argue that claim 23 now only requires “providing” the access device, thus eliminating the requirement of “providing” the other system components, which is impermissibly broadening. Doc. No. 634, June 2, 2016 *Hearing Transcript* at 134:21-24. Network-1 argues that claim 23 requires “a data node, data signaling pair, access device, main power source, and secondary power source all be provided” because

“other claim elements expressly require steps that use them.” *Id.* at 140:6-11. Thus, Network-1 concludes that even though claim 23 “does not specifically use the word ‘providing’ with respect to four elements does not mean that these elements are not required” and that the scope of claim 23 is not broader. Doc. No. 622 at 24.

Claim 23 eliminated the requirements of “providing” the data node, data signaling pair, main power source, and secondary power source and thus resulted in a broader claim scope. Network-1 has not demonstrated that the appearance of such elements as part of other method steps in Claim 23 is equivalent to the recital of the “providing” limitations recited in Claim 6. Claim 23 is therefore invalid.

CONCLUSION

For the foregoing reasons, the Court hereby **ADOPTS** the claim constructions set forth above. For ease of reference, the Court’s claim interpretations are set forth in a table in Appendix A. Furthermore, the Court **RECOMMENDS** that Defendants’ Motion for Partial Summary Judgment of Invalidity Under § 305 be **GRANTED-IN-PART** and **DENIED-IN-PART**. Specifically, the Court **RECOMMENDS** Defendants’ Motion for Partial Summary Judgment of Invalidity be **GRANTED** as to Claim 23, but otherwise be **DENIED**.

Within fourteen days after receipt of the magistrate judge’s report, any party may serve and file written objections to the findings and recommendations of the magistrate judge. 28 U.S.C. § 636(b).

A party’s failure to file written objections to the findings, conclusions and recommendations contained in this Report shall bar that party from *de novo* review by the district judge of those findings, conclusions and recommendations and, except upon grounds of plain error, from attacking on appeal the unobjected-to proposed factual findings and legal conclusions

accepted and adopted by the district court. *Douglass v. United Servs. Auto Assn.*, 79 F.3d 1415, 1430 (5th Cir. 1996) (en banc), *superseded by statute on other grounds*, 29 U.S.C. § 636(b)(1) (extending the time to file objections from ten to fourteen days).

So ORDERED and SIGNED this 2nd day of November, 2016.



K. NICOLE MITCHELL
UNITED STATES MAGISTRATE JUDGE

APPENDIX A

Terms, Phrases, or Clauses	Court's Construction
“adapted for data switching”	“configured to route (switch) data from a sending device to one or more receiving devices addressed by the sending device, using temporary rather than permanent connections”
“access device”	“a device that can receive and transmit data over a network”
“data signaling pair”	“a pair of wires used to transmit data between the data node and the access device”
“controlling power”	No construction necessary
“main power source”	“a DC power source”
“secondary power source”	“a source of power connected to provide power between the data node and the access device using the data signaling pair; the driving points of the secondary power source must be physically separate from the driving points of the main power source”
“low level current”	“a non-data-signal current that is sufficient to begin start up of the access device but that is not sufficient to sustain the start up”
“preselected condition	“a parameter of the voltage on the signaling pair that indicates whether an access device is able to accept remote power from the data node, wherein the parameter is selected in advance of sensing the voltage”
“data node”	“data switch or hub”
“from said main power source” / “from a main power source”	Plain meaning